



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,243	12/02/2003	John B. Amundson	H0005445-9950 (1161.11411)	3516
128	7590	06/02/2006	EXAMINER PHAM, THOMAS K	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			ART UNIT 2121	PAPER NUMBER

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/726,243	AMUNDSON ET AL.	
	Examiner	Art Unit	
	Thomas K. Pham	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This is in response to the amendment filed 03/24/2006.
2. Applicant's amendment, with respect to claims 1-39, has been considered but is moot in view of new ground(s) of rejection presented in this Office action.

Quotations of U.S. Code Title 35

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

7. Claims 1-12, 16-24 and 28-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0195640 ("Krocker") in view of U.S. Patent No. 6,608,560 ("Abrams").

Regarding claim 1

Krocker teaches the invention including an HVAC controller for use in controlling one or more components of an HVAC system, the HVAC controller comprising: a controller adapted to determine if one or more service events occurred for one or more the components of the HVAC system; and a display unit configured to display information when a service event is determined by the controller is taught as a service tool connected to an HVAC controller for information regarding the type and configuration of the components of the HVAC system determined by the controller and display the result to a service technician and also to an expert observer for analysis (see abstract and paragraphs 42 and 43).

Krocker does not specifically teach a display unit configured to display servicing information when a service event is needed is needed to an HVAC system.

However, Abrams teaches a display unit configured to display servicing information such as contractor contact information when a service event is needed to an HVAC system(see C 5 L 4-10 and C 4 L 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the display of servicing information of Abrams with the system of Krocker because it would provide the customer with readily contact to an HVAC contractor when a service event is needed.

Regarding claim 19

Krocker teaches the invention including a programmable controller for use in controlling one or more components of a system, the controller comprising: a controller adapted to determine if one or more service events occurred for one or more the components of the system; and a display unit configured to display information determined by the controller is taught as a service tool connected to an HVAC controller for information regarding the type and configuration of the components of the HVAC system and display the result to a service technician and also to an expert observer for analysis (see abstract and paragraphs 42 and 43).

Krocker does not specifically teach a display unit configured to display a logo when a service event is needed.

However, Abrams teaches a display unit configured to display servicing information such as contractor contact information when a service event is needed to an HVAC system (see C 5 L 4-10 and C 4 L 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the display of servicing information of Abrams with the system of Krocker because it would provide the customer with readily contact to an HVAC contractor when a service event is needed.

Regarding claim 30

Krocker teaches the invention including an HVAC system, comprising: one or more components for regulating a set of environmental conditions within a structure, and a controller operatively connected to said one or more components, said controller including display means for displaying information is taught as a service tool connected to an HVAC controller for

Art Unit: 2121

information regarding the type and configuration of the components of the HVAC system and display the result to a service technician and also to an expert observer for analysis (see abstract and paragraphs 42 and 43).

Krocker does not specifically teach display means for displaying servicing information when a service event is needed.

However, Abrams teaches a display unit configured to display servicing information such as contractor contact information when a service event is needed to an HVAC system (see C 5 L 4-10 and C 4 L 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the display of servicing information of Abrams with the system of Krocker because it would provide the customer with readily contact to an HVAC contractor when a service event is needed.

Regarding claim 36

Krocker teaches the invention including an HVAC system, comprising: one or more components for regulating a set of environmental conditions within a structure, and a controller operatively connected to said one or more components, said controller including an interface for programming a service event display mode in the controller, and display means for displaying controller information when a service indicator is detected in at least one of said one or more components is taught as a service tool connected to an HVAC controller for information regarding the type and configuration of the components of the HVAC system and display the result to a service technician and also to an expert observer (see abstract and paragraphs 42 and 43).

Art Unit: 2121

Krocker does not specifically teach display means for displaying servicing information when a service event is needed in at least one of said one or more components.

However, Abrams teaches a display unit configured to display servicing information such as contractor contact information when a service event is needed to an HVAC system (see C 5 L 4-10 and C 4 L 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the display of servicing information of Abrams with the system of Krocker because it would provide the customer with readily contact to an HVAC contractor when a service event is needed.

Regarding claim 37

Krocker teaches the invention including an HVAC controller for use in controlling one or more components of an HVAC system, the HVAC controller comprising: a controller adapted to determine if one or more service events occurred for one or more the components of the HVAC system is taught as a service tool connected to an HVAC controller for information regarding the type and configuration of the components of the HVAC system and display the result to a service technician and also to an expert observer (see abstract and paragraphs 42 and 43).

Krocker does not specifically teach notifying means for notifying a service provider when a service event is needed.

However, Abrams teaches notifying means for notifying a service provider when a service event is needed (see C 3 L 55-67 and C 5 L 36-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the notification system of Abrams with the system of Krocker because it

Art Unit: 2121

would provide the customer with readily contact to an HVAC contractor when a service event is needed.

Regarding claims 2, 3, 20 and 31

Abrams teaches wherein said servicing information includes a graphical representation of a logo and/or a telephone number (see C 5 L 3-10).

Regarding claims 4 and 21

Abrams teaches wherein said servicing information includes a service event code (see C 4 L 30-41).

Regarding claims 5 and 22

Abrams teaches wherein said servicing information includes a description of the service event (see C 4 L 43-52).

Regarding claims 6 and 32

Abrams teaches wherein said controller determines if a service event occurred by receiving a service event indicator from at least one of said one or more components (see C 4 L 43-52).

Regarding claims 7 and 33

Abrams teaches wherein said controller determines if a service event occurred by determining if an equipment service event timer expired (see C 4 L 53-62).

Regarding claims 8 and 34

Abrams teaches wherein said service event is activated by a user (see C 3 L 40-47).

Regarding claims 9, 24 and 35

Art Unit: 2121

Abrams teaches wherein said one or more components are one or more of a heating unit, a cooling unit, a ventilation unit, a filtration unit, a UV lamp unit, a humidifying/dehumidifying unit, a local sensor, and a remote sensor (see C 3 L 40-43).

Regarding claims 10 and 28

Abrams teaches wherein said display unit comprises a touch screen (see C 3 line 47-51).

Regarding claims 11 and 29

Abrams teaches wherein said display unit comprises an LCD panel (see C 4 L 1-5).

Regarding claim 12

Krocker teaches a data input port coupled to the controller for uploading data to the controller (see paragraph 37).

Regarding claim 16

Abrams teaches wherein the controller determines if one or more service events occurred for one or more the components of the HVAC system by polling at least selected components of the HVAC system (see C 4 L 43-52).

Regarding claim 17

Abrams teaches wherein at least some of the components of the HVAC system communicate with the controller over a network (see C 3 L 55-67).

Regarding claim 18

Abrams teaches wherein at least some of the components of the HVAC system communicate with the controller via an I/O interface (see C 3 L 55-67).

Regarding claim 23

Abrams teaches wherein said system includes an HVAC system (see C 1 L 7-10).

Art Unit: 2121

Regarding claim 38

Abrams teaches wherein the service provider is one of a contractor, a service referral organization, a utility, a retailer, or a manufacturer (see C 1 L 60-64, “HVAC contractor”).

Regarding claim 39

Abrams teaches wherein the notifying means notifies a different service provider for two different service events (see C 4 L 6-21).

8. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krockner in view of Abrams and further in view of U.S. Patent No 6,741,915 (“Poth”).

Regarding claim 13

Krockner and Abrams do not specifically teach the controller is adapted to receive a graphical representation of a logo via the data input port, and wherein the display unit is configured to display the logo when a service event is determined by the controller.

However, Poth teaches a programmable digital thermostat including a serial port within the casing to communicate with an external device (see C 6 L 18-27) for the purpose of uploading and/or downloading data between the thermostat and the external device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the data transferring mechanism of Poth with the system of Krockner because it would provide for the purpose of uploading and/or downloading data between the thermostat and the external device.

Regarding claim 14

Poth teaches wherein the data input port is a wired port (see C 4 L 52-53).

Art Unit: 2121

Regarding claim 15

Poth teaches wherein the data input port is a wireless port (see C 4 L 58-60).

9. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krockner in view of Abrams and further in view of U.S. Patent No. 5,877,957 ("Bennett").

Regarding claim 25

Krockner and Abrams do not specifically teach the system includes a security system.

However, Bennett teaches an automation system for controlling programmable devices by using dialog for training devices, wherein the devices includes a home security system (see C 1 L 30-32) for the purpose of providing an inexpensive, easily installed, and easily programmable and reprogrammable system by a user with no experience in programming (see C 2 L 16-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the automation system of Bennett with the system of Krockner because it would provide for the purpose of providing an inexpensive, easily installed, and easily programmable and reprogrammable system by a user with no experience in programming.

Regarding claim 26

Bennett teaches the system includes a lighting system (see C 1 L 25-27).

Regarding claim 27

Bennett teaches the system includes a sprinkler or drip water system (see C 1 L 25-28).

Art Unit: 2121

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
Patent Examiner

A handwritten signature in black ink, appearing to read 'Thomas Pham', with a stylized, flowing script.

May 28, 2006